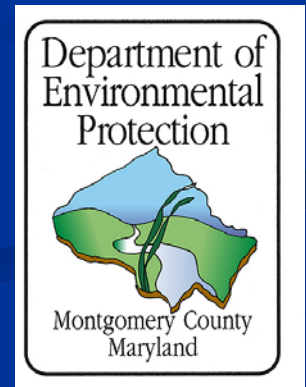


Watershed Restoration Program and Purpose of the Forest Estates Stormwater Project



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What is the Problem?



- Impervious (hard surfaces)
= Increased runoff & pollutants



- Increased storm flows & decreased base flows



- Streams eroded, incised

08.05.2008



- Infrastructure threatened



- Storm drain systems convey heated, dirty water directly to streams



- Degraded aquatic habitat & water quality

Montgomery County's (NPDES) Permit

National Pollutant Discharge Elimination System

- Montgomery County's NPDES Permit (issued in 2010) Requires:
 - New stormwater management for 20% of existing impervious area that is currently unmanaged (~ 4,100 acres).
 - Meet goals set forth in the "Potomac River Watershed Trash Treaty"
 - Identify pollution sources and improve water quality in all county watersheds
 - Increase use of Environmental Site Design (ESD), or **Low Impact Development (LID)**
 - Variety of small-scale practices to capture stormwater runoff close to the source
 - Slows rate and reduces volume of runoff
 - Allows stormwater to soak into the ground, replenishing ground water
 - Filters out pollutants



Bioretention



Pervious Pavers



Curb Extension

Efforts on Wheaton Branch

**Dennis Ave
Health Center
LID Retrofit**

**Wheaton Branch
Stormwater Pond**

**Proposed Roadway
Stormwater Controls
& RainScapes**

Project Limits

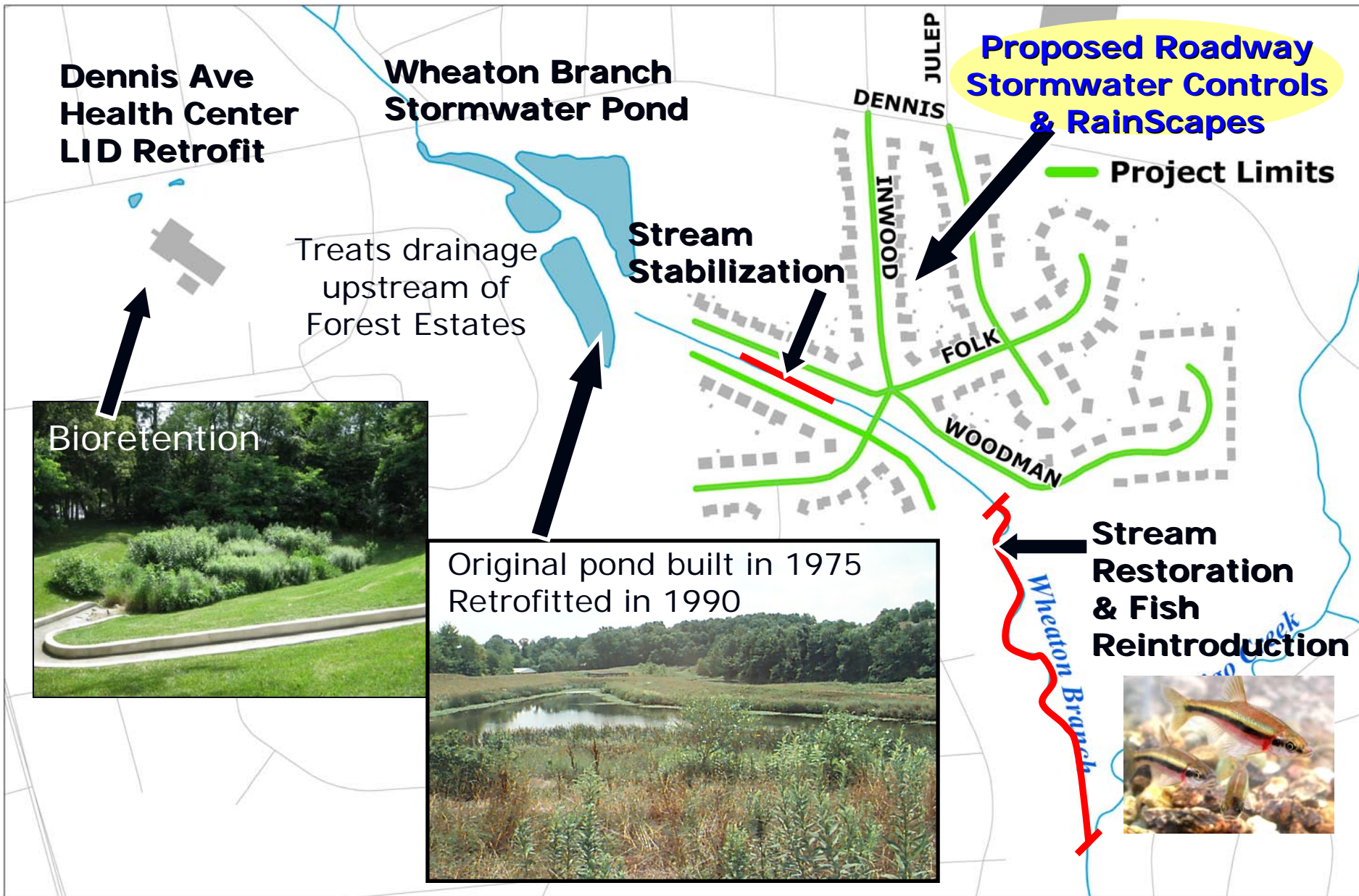
Treats drainage
upstream of
Forest Estates

**Stream
Stabilization**


Bioretention

Original pond built in 1975
Retrofitted in 1990

**Stream
Restoration
& Fish
Reintroduction**



Proposed Project Goals

- 
- A photograph of a forest stream with a semi-transparent text box overlaid. The stream flows through a wooded area with trees and fallen leaves. The text box contains a list of four project goals.
- Maximize stormwater management to improve conditions in the Wheaton Branch tributary and Sligo Creek
 - Improve water quality treatment
 - Encourage infiltration of runoff from parking lots, roadways and other impervious surfaces
 - Fulfill the requirements in the County's National Pollutant Discharge Elimination System (NPDES) permit

It's easy being green...



Happy St Pat's Day to Ya!

joish07